IN THE DRAWINGS

The attached sheet of drawing includes changes to Fig. 1. This sheet, which includes Fig. 1, replaces the original sheet including Fig. 1.

Attachment: Replacement Sheet

REMARKS

In the Office Action claims 1-14 were rejected. By the present Response, claims 1, 3, 7, 9, 10, and 12 have been amended. Upon entry of the amendments, claims 1-14 will be pending in the present patent application. Reconsideration and allowance of all pending claims are requested.

Drawing Objections

The drawings were objected to as failing to comply with 37 C.F.R. 1.84(p)(5) for failing to include a reference character in Fig.1. The Specification has been amended to overcome this drawing objection raised by the Examiner. The drawings were also objected under 37 C.F.R. 1.83 (a) for failing to show reference numerals as described in the Specification. Fig. 1 has been amended to include the reference numerals 240 and 250 as described in the Specification.

Objections to Specification

The Specification was objected to for using the same reference character for two elements. The Specification has been amended to overcome this objection and also to overcome the objections raised with respect to drawings.

Rejections Under 35 U.S.C. § 112

In the Office Action, claims 1-14 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Applicants have accordingly amended claims 1, 3, 7, 9, 10, and 12 to recite the subject matter more clearly. With these amendments the Applicants believe that the rejections under 35 U.S.C. § 112 should be withdrawn.

Rejections Under 35 U.S.C. § 102

Claims 1, 2, 5-9, 13 and 14 were rejected under 35 U.S.C. § 102 (b) as being anticipated by Wozniczka et al. (U.S. Patent No. 6, 232, 008, hereinafter "Wozniczka"). Claims 1, 2, 5, 7-9, and 13 were rejected under 35 U.S.C. § 102 (b) as being anticipated by Jones et al. (U.S. Patent No. 5,998,054, hereinafter "Jones"). Claims 1, 2, 5-9, 13, and 14 were rejected under 35 U.S.C. § 102 (e) as being anticipated by Issacci et al. (U.S. Patent No. 6, 686, 084, hereinafter "Issacci").

Independent claims 1 and 7

Wozniczka, Jones and Issacci do not teach a plurality of lower ribs coupled to a lower section, a plurality of upper ribs defining an upper serpentine channel and the plurality lower ribs defining a lower channel parallel to the upper serpentine channel.

Wozniczka describes an electrochemical fuel cell stack with improved reactant manifolding and sealing (*see*, Abstract). None of the channels shown in Figs. 3-5B of the reference disclose, teach or suggest "serpentine" nature of the channels as recited in claims 1 and 7. In fact, Wozniczka does not include any discussion of the shape of the channels and the drawings do not indicate the "serpentine" nature of the channels.

Jones describes a hydration system that includes fuel cell fluid flow plates and injection ports. Each plate has flow channels with respective inlets for receiving respective portions of a given stream of reactant fluid for a fuel cell (*see*, Abstract). Jones describes flow channels 124" that are serpentine as described in the discussion of Fig. 2, and an input channel 140" on a face 122" of fuel cell fluid flow plate 120" opposite to face 122 on which flow channels 124" are formed. *See*, Fig. 4; column 5, lines 25-30 and column 7, lines 43-50. However, the single input channel 140" as shown in Fig. 4 appears to be a manifold and more specifically Jones does not disclose, teach or suggest "plurality lower ribs defining a lower channel parallel to said upper serpentine channel" as recited in independent claims 1 and 7.

Issacci describes an apparatus and method for cathode-side disposal of water in an electrochemical fuel cell (*see*, Abstract). The Examiner has not clearly identified what elements in Issacci might anticipate the specific claim recitations. The cooling channel 18 as shown in Figs. 1B and 1C is not serpentine in nature and does not define an upper serpentine channel or lower channel (*see*, column 5, lines 61-67). The flow feed 22 as shown in Fig. 1A also does not have the structure of upper serpentine channel *and* lower channel (*see*, column 6, lines 33-35). Additionally, Issacci, in Figs. 1A, 3, 4A and 4C, illustrates the flow of fluid via the arrow 54. The flow described is convection flow as stated in column 7, lines 43-47. Thus Issacci teaches away from the claim recitations of "wherein said upper serpentine channel and said lower channel are disposed to allow a flow of a fluid therethrough" as recited in independent claims 1 and 7. At the very least, Issacci fails to describe the recited serpentine channel and parallel lower channel.

Thus none of the applied references disclose, teach or suggest all the claim recitations of independent claims 1 and 7. As such, none of the references can establish a *prima facie* case of anticipation. Claims 2-6 depend from claim 7 and claims 8-14 depend from claim 8. The dependent claims are believed to be allowable at least by virtue of their dependency from an allowable base claim.

Conclusion

In view of the remarks and amendments set forth above, Applicants respectfully requests allowance of the pending claims. If the Examiner believes that a telephonic interview will help speed this application toward issuance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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